Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/US04/037000

International filing date: 04 November 2004 (04.11.2004)

Document type: Certified copy of priority document

Document details: Country/Office: US

Number: 60/603,608

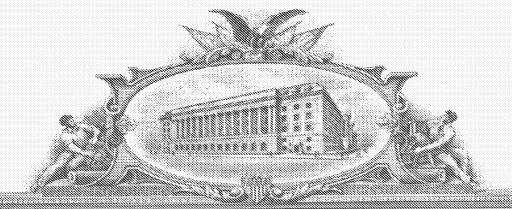
Filing date: 23 August 2004 (23.08.2004)

Date of receipt at the International Bureau: 24 January 2005 (24.01.2005)

Remark: Priority document submitted or transmitted to the International Bureau in

compliance with Rule 17.1(a) or (b)





TWO ARE TWO WILLIAM THE SECURISE NIS SECULO CONTROL

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

January 14, 2005

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE.

APPLICATION NUMBER: 60/603,608
FILING DATE: August 23, 2004

RELATED PCT APPLICATION NUMBER: PCT/US04/37000



1274110

Certified By

A. W.) inter-

Jon W Dudas

Under Secretary of Commerce for Intellectual Property and Acting Director of the Unites States Patent and Trademark Office 16623

PTO/SB/16 (04-04) Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c)

Express Mail Label No. ED018417273US

INVENTOR(S)									
Given Name (first and middle [if any])		Family Name or Surname		(City a	Residence (City and either State or Foreign Country)				
Crispina O.		Caballero	-	Stouffville			PT 98		
Additional inventors are b	eing named on the	11	_separately num	bered sheets a	ttached h	ereto	30.0		
TITLE OF THE INVENTION (500 characters max) Direct all correspondence to: CORRESPONDENCE ADDRESS									
Direct all correspondence to: CORRESPONDENCE ADDRESS									
Customer Number: 28710						N i			
OR									
Firm or Individual Name									
Address									
Address									
City			State		Zip				
Country			Telephone		Fax	<u> </u>			
ENCLOSED APPLICATION PARTS (check all that apply)									
Specification Number of Pages 6 CD(s), Number									
Drawing(s) Number	\checkmark	Other (specify) Transmittal Letter							
Application Data Sheet. See 37 CFR 1.76									
METHOD OF PAYMENT	OF FILING FEES FO	OR THIS PROVISIONAL AF	PLICATION FOR	PATENT					
Applicant claims sn		FILING FEE							
A check or money order is enclosed to cover the filing fees. Amount (\$)									
The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 50-0235									
Payment by credit card. Form PTO-2038 is attached.									
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government. No. Yes, the name of the U.S. Government agency and the Government contract number are:									
Respectfully submitted Date August 23, 2004									
SIGNATURE //		REGISTRATION NO. 32,601							
TYPED or PRINTED NAM	<i>(1</i>	(if appropriate) Docket Number: MCEA-P3-04							

TELEPHONE (312) 240-0824

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PROVISIONAL APPLICATION COVER SHEET Additional Page

PTO/SB/16 (04-04)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Docket Number MCEA-P3-04

INVENTOR(S)/APPLICANT(S)							
Given Name (first and middle [if any])	Family or Surname	Residence (City and either State or Foreign Country)					
Thomas F.	Conroy	Englewood, CO					
Steven A.	Eisenberg	Atlanta, GA					
Brian G.	Holland	Needham, MA					
Stephen F.	Krayser	Hull, MA					
Richard W.	Mann	Greensboro, NC					
Charles M.	Underwood II	Weymouth, MA					

[Page 2 of 2]

2___of___2 Number

"Express Mail" mailing label number: <u>ED018417273US</u>
I, Peter K. Trzyna (Reg. No. 32, 601), hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated below and is addressed to MS: Provisional Patent Application; Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date set forth below:

Signed:

ter K. Trzyna (Reg. No. 32,601)

Date: August 23, 2004

COMPUTER SYSTEM FOR REDUNDANT INSURANCE RESERVE FINANCING

Inventors:

Crispina O. Caballero 4108 Bethesda Road Stouffville, ON Canada L4A 7X5 Canadian Citizen

Thomas F. Conroy 3825 S. Colorado Blvd. Englewood, CO 80113-4202 U.S. Citizen

Steven A. Eisenberg 750 Park Ave. Unit 31N Atlanta, GA 30326 U.S. Citizen

Brian G. Holland 6 Glendale Road Needham, MA 02492 U.S. Citizen Stephen F. Kraysler 26 Reef Point Hull, MA 02045 U.S. Citizen

Richard W. Mann 303 Wentworth Drive Greensboro, NC 27408 U.S. Citizen

Charles M. Underwood II 30 Queen Anne's Drive, TH3 Weymouth, MA 02189 U.S. Citizen The present invention involves a computer system managing reinsurance contracts and related asset trust(s) (which depending on the situation, can be required by regulators over the term of the contract), calculating the fluctuating reserve requirements and the related reinsurance trust(s) contents requirements, and computing amounts of related funding financial instruments therefore. In general, uncertain events that can be measured using statistical or actuarial methodologies but are not certain in timing and/or amounts, and such events are uncontrolled by the parties, can produce financial results that may vary from expected results. These periodic recomputations can be carried out with a computer system recalculating the amount of reserves under the contract, the amounts required to be held in the asset trust(s) and, where used, the amount of new securities to be issued or retired from each risk traunche to keep the funding of the trust(s) at the appropriate levels.

5

10

15 ·

20

25

Reinsurance reserve requirements vary from period to period based upon emerging experience. As such, reserve trust(s) amount requirements also change based upon the experience. In addition, values of reinsurance reserves trusts are calculated using market values of the assets in the trust(s) on the date of the financial statements currently filed.

The transaction starts by finding an appropriate reinsurer, appropriate asset source(s) and an appropriate insurance company ceding party(ies).

Once done, the business to be reinsured must be evaluated and priced, both economically and statutorily, using at least one computer-based pricing program; the expected reserve requirements can be calculated using computer analysis of inputted data; the value of the economic and excess statutory reserves can be calculated by computer program(s) to determine the value required or appropriate for the trust.

While the trust(s) can be funded in various ways, one approach is for the reinsurer to issue securities (directly or by using a Special Purpose Vehicle) into the capital markets to raise the necessary funds to purchase assets for the trust. Since the asset requirements change each reporting period (usually quarterly), a computer system can be used

to calculate the amounts based upon the emerging experience of the business reinsured and the market value of the assets in the trust. When a Special Purpose Vehicle (SPV) is used to issue the securities, Tax and GAAP Accounting requirements can have the SPV issue multiple traunches of securities to appropriately manage "deemed ownership" considerations. Should multiple traunches of trust funding financial instruments be necessary, the relative proportions of each traunche can be calculated by computer using risk analysis software, and these calculations can be made at the end of each reporting period (usually every 90 days), with appropriate adjustment to the contents of the trust(s).

5

10

15 ·

20

25

Recently adopted GAAP Accounting requirements also facilitate the use of "Funding Agreements" (FA) or "Guaranteed Investment Contracts" (GIC) as the securities issued to the Capital Markets, rather than other types of debt instruments, particularly when a SPV is used in the transaction. When FA's or GIC's are used, the computer system can calculate the amounts of the reinsurer's reserves to be posted for these agreements.

The Funding Agreement (including the above-mentioned Guaranteed Investment Contracts) approach can be carried out such that the funding for the reinsurance trust is devoid of a bond issue; the liability created by this approach differs from debt (e.g., a note) and can be viewed as a policy reserve which can involve additional calculations.

The computer system(s) can also produce periodic reports (at least quarterly) on current reserve requirements, current trust values, current trust value requirements and reinsurance premiums and claims for the period. The computer system(s) can produce projections of the next period's needs so that the trust(s) funding adjustments can be timely made on or before the date of the next reporting period.

In addition, the computer-based system(s) can be used to produce all contracts between the participating parties.

For example, this approach can be used to manage the fluctuating reserve requirements under Guideline XXX for establishing statutory reserves for guaranteed level

premium products (term and/or universal life), e.g., in the U.S. Life Insurance market. (In some jurisdictions, the reinsurer is only required to post economic reserves, which are less than US Statutory reserves.) When business is reinsured to a jurisdiction that only requires economic reserves to be posted, however, the reinsurer must post security for the full amount of the US Statutory reserves for the reinsured company to be able to receive credit for the reinsurance from the Statutory authorities. This security can be posted several ways, including the use of assets held in a trust(s).

5

10

15.

20

25

A Reinsurance Company can segment the insurance risks from the capital requirements and manage each risk component with the most efficient party. The insurance risks can be moved to a Reinsurer (s), Retrocessionnaire (s), a Retrocession Pool, or another insurance risk assumer. The capital requirements can be funded thru a Bank, Syndicate, Pension Plan, another Securities Lender, or an investor through the purchase of any portion of any traunche of trust funding financial instruments. As such the Life Insurance Company can receive the mortality risk protection as well as the collateral for the economic reserve and the credit for the redundant reserves efficiently through the Reinsurance Company.

The transaction can effectively be carried out with computer support, including communications and documentation. Insurance Company 2 pays reinsurance premiums to Reinsurance Company 4 in exchange for benefit claim payments, collateral for economic reserves and credit for redundant reserves. Reinsurance Company 4 in turn contracts with Insurance Risk Assumer (Reinsurer, Retrocessionnaire, Retrocession Pool) 10 to pay benefit claim premiums in exchange for benefit claim payments and collateral for economic reserves. Reinsurance Company 4 at the same time thru SPV (Special Purpose Vehicle) 12 sells trust funding financial instruments to Lender (Bank, Syndicate, Pension Plan, Investor) 6 and uses proceeds to purchase assets to place in Reinsurance Trust 8 in exchange for asset charges. SPV (Special Purpose Vehicle) 12 provides securities to Lender (Bank, Syndicate, Pension Plan, Investor) 6 and in turn receives funding. Reinsurance Company 4 provides oversight to

Reinsurance Trust 8 and is enabled by the assets in the Reinsurance Trust 8 to provide the credit for redundant reserves to the Insurance Company 2. Oversight includes the period recalculation of all reserve, trust and trust funding financial instrument values as they change over time.

5

Reinsurance Company 4 can work with Computer Systems 32 that could include an Administration System 28 to process the transactions, an Actuarial Pricing System 22 to generate premiums, benefits and reserves, a Risk Analysis System 24 to calculate risk charges and determine asset traunches and a Valuation System 26 to value assets, reserves and track experience versus expected.

10

15.

Financial Output Analysis 34 as well as Processed Model Documents 36, containing such data as reserve requirements, trust values, trust value requirements, reinsurance premiums, benefit claims premiums and benefit claims, are produced periodically or on some agreed-upon reporting basis, by Computer Systems 32 which maintains, all throughout the process and duration of the transaction, regular communications with other computer systems maintained by parties to the transaction. These computer systems include Insurance Company Computer System 42, Reinsurance Company Computer systems 44, Insurance Risk Assumer Computer Systems 46, Securities Lender Computer Systems 48, Reinsurance Trust Computer Systems 50, Advisors Computer Systems 52, Consultants Computer Systems 54 and Regulatory Bodies Computer Systems 56.

20

The assets could be generated thru Funding Agreement 100 among parties SPV (Special Purpose Vehicle) 12 and at least one of Investor 104, Investor 106 and Investor 108. The Funding Agreement (including the above-mentioned Guaranteed Investment Contracts) approach can be carried out such that the funding for the reinsurance trust is devoid of a bond issue; the approach differs from debt (e.g., a note) and can be viewed as a policy reserve.

25

To highlight, the use of a separate securities provider and the bifurcation of the financial and insurance risks, which can result in a party other than a reinsurer assuming the

financial risk, can be used in connection with the funding agreement usage in connection with a reinsurance trust as detailed herein. However, the separating of financial and insurance risks can be viewed as independent from such usage, such that one need not be used in connection with the other.

